Level of Students' Satisfaction with the Academic Environment in a Nursing Campus

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Keywords	Abstract
Academic environment, Administrative support, Nursing students, Quality of teaching, Satisfaction	*The academic environment refers to the educational setting of the classroom, encompassing quality teaching, collaboration and teamwork, access to learning facilities, and administrative support. A supportive academic environment can help nursing students achieve higher academic performance and a higher level of satisfaction. Students' satisfaction with the academic climate means the feeling of happiness and fulfilment experienced in the educational environment of their institution. Students' satisfaction can be the basis for identifying the areas that need improvement in the academic environment, leading to better learning experiences. The main objective of this study was to determine the students' satisfaction with the academic environment in a nursing campus.* *A descriptive cross-sectional design was used to find out students' satisfaction with the academic environment in a nursing campus. Maharajgunj Nursing Campus was the study setting. The study population consisted of all bachelor-level nursing students. The census method was used to collect the samples. The total sample size was 238. A self-administered questionnaire consisting of 40 items with a Likert Scale (1-5) was used to collect the data. The collected data were analysed using descriptive and inferential statistics.* *The study shows that 89.5% of the nursing students were highly satisfied with the academic environment, while 10.5% were least satisfied. The study also reveals that students' level of satisfaction with the academic environment was significantly associated with age (p=0.036) and academic year(p=0.044).* *Most of the students are highly satisfied with the academic environment, basically with the quality of teaching. However, they are less satisfied with the support system during stress, channels for expressing their complaints, and administrative support. A student's counselling and support system needs to be enhanced for a better learning environment.*

Introduction

An academic learning environment refers to everything in the classroom, faculty, or university. It encompasses the culture of a school or class and its presiding ethos and characteristics, including how students interact with each other, as well as how teachers may recognize an educational setting to facilitate learning. It influences the overall learning process and helps to modify the educational environment, resulting in quality improvement (Bakhshialiabad et al., 2015). Globally, rapid and continuous changes in the educational system of health professions, including new programmes, curricula, and strategies, have increased attention to improve the learning environment of all levels of students in universities. The purpose of higher education is to provide a learning environment that guides the students toward academic achievements, which promote their professional and personal lives (Bista et al., 2020). Managers need to make an effort to create an educational environment for students for proper learning. A supportive learning environment is essential for medical education and will increase positive perception towards the learning environment (Garbuja et al., 2020). Students' satisfaction with the academic environment means the feeling of happiness and fulfilment experienced in their institution. A higher satisfaction level leads to students' well-being and academic achievements. A supportive learning environment can help nursing students achieve higher academic performance (Litmanen et al., 2014). Students' satisfaction has become a major challenge for universities (Arambewela & Hall, 2013). A study conducted at Port Said University revealed that the student satisfaction score was 57.5%. It means the satisfaction level was moderate (Ahmed et al.,2020). In a study in Iran using the Dundee Ready Educational Environment Measure (DREEM), the total

mean score was 114.3 (SD 20.6) out of 200, corresponding to 57.15%, which was considered positive (Hamid et al., 2013). A study on "perception of learning environment at B.P. Koirala Institute of Health Science, the score was 131.25 out of 200, indicating the perception as positive(Shrestha et al., 2019). Dissatisfaction with the academic environment might lead to decreased motivation, poor academic performance, increased stress levels, and even dropping out for students. Increased satisfaction increases the success rate, decreases stress levels, and decreases dropout. However, there are limited studies that assessed the level of satisfaction with the academic environment among nursing students. A good learning environment is not limited to the teacher's good communication skills, knowledge, credibility, preparedness, and teaching excellence; it includes providing the environment that best prepares the students for their future professional life. A positive academic environment enhances students' engagement, motivation, and overall satisfaction (Tripathy & Dudani, 2013). A study conducted by Hamid et al. found that, mean score was 114.3 out of 200, which was considered positive. A similar study in Saudi Arabia showed a satisfaction score of 51.72±14.63 out of 100 (El Sayed Abusaad et al., 2015). A similar study conducted by Mohamad Helal et al. in 2013, in Egypt, found the mean score 92.6, indicating plenty of problems. Most students (60.9%) responded 'plenty of problems' to the educational environment. A similar study conducted by Mirghani & Elnour in 2017 in Omdurman showed positive perception, with a score of 114.61. A comparative study conducted by Abraham et al. in 2018 identified gender wise differences in their perceptions. First-year students were found to be more satisfied. Gender wise, there was not much differences. The study revealed that both groups of students perceived the

learning environment positively. In a study (Tripathy & Dudani, 2013), the overall score was 126.3/200, indicating that the perception of the educational environment was positive. However. it should be a continuous process to monitor the feedback from the students to identify problem areas so that necessary remedial measures can be instituted at the earliest. A similar study (Victor et al., 2017) conducted in Islamabad, found mean score (119/200) is suggestive of more positive perceptions. In a similar study in Srilanka found mean scores as 112.0 and 106.90 for the male and female undergraduates, respectively, indicating relative satisfaction with the perceived environment (Chandana & Hettiarachchi, 2013). A similar study conducted at Saint Louis University found the average score to be 121.26 out of a total of 200 points, which can be interpreted as a 'more positive perception (Barcelo, 2016). A study conducted among nursing and midwifery students in Hamadan Nursing and Midwifery Campus found that the perception had a significant difference from high-year students, data showed that there is no significant difference between the perceptions of the students in different academic years. Students in the first, second, third, and fourth years had different perceptions of the school environment. (Oshvandi, 2016)

Assessing the students' satisfaction with the educational environment is necessary for appropriate change and good academic performance of the students. The DREEM tool is the most common tool used by the researcher to identify the students' satisfaction, which covers the five domains. Very few researchers used the UNASS tool. Assessing the satisfaction towards the educational environment among students should be a continuous process to monitor the feedback from the students to identify problem areas so that necessary remedial measures can be

instituted at the earliest for better learning and practice. Students' satisfaction has become a major challenge and compelling interest to colleges and universities as they seek to continually improve the learning environment for the students and meet the academic expectations of students. Accordingly, it is so important to study the learning environment and how it's related to students' satisfaction that it is one of the targets of quality assurance and accreditation in higher education (Arambewela & Hall, 2013). So the researcher was interested in finding out the satisfaction of nursing students. The general objective of the study was to find out the students' satisfaction with the academic environment in a nursing campus, and the research question was: What was the level of students' satisfaction with the academic environment in a nursing campus?

Theoretical perspective: Application of the Input-Output Model

The input-output model in education views the educational system as a production process where inputs (teachers, students, materials, funding) are transformed through a process (teaching, learning, assessments) to produce outputs (educated, skilled students). The input-output model in education is an adaptation of the economic model developed by Wassily Leontief. While Leontief's original model was for economics, the framework has been adopted and adapted by researchers in education for planning, resource allocation, and efficiency analysis (Clark, 1984).
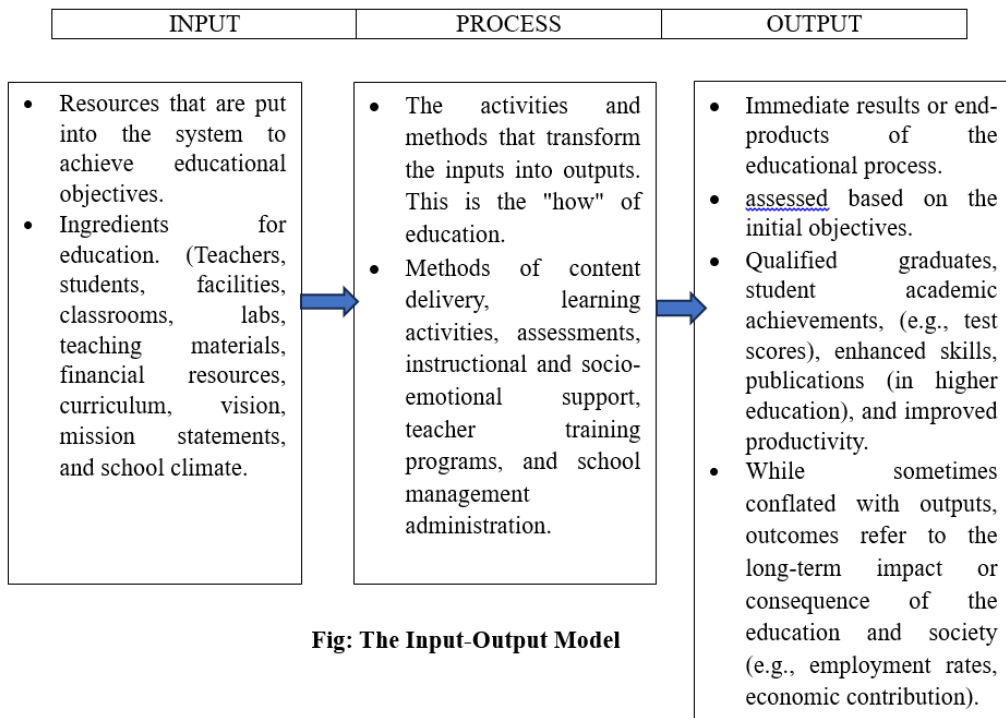
In my study, "Inputs include: Human Resources (Teachers, students, and administrative staff). Physical Resources (Buildings, equipment, and learning materials, such as textbooks). Financial Resources (Funding allocated to the school or program). Curriculum (The objectives, content, and standards for what is taught).

Process includes: Instructional Activities (The delivery of lessons, activities, and assessments by teachers. Learning Activities (How students engage with the material, participate in discussions, and complete assignments). Systemic Management (The overall administration and management of the educational institution).

Outputs include: Academic Achievement (The tangible results of the educational process, such as test scores, grades, and graduation rates). Skills and Knowledge (The acquired competencies, knowledge, and abilities of the students). Personal Development (Improvements in students' attitudes, motivation, and other personal attributes).

Input variable and the process variable of students' learning were assessed through the structured self-administered questionnaire, and the overall score was considered as the output variable, which was categorized in terms of satisfied and dissatisfied perception of educational environment of the students. The output variables: academic achievement, skills, and knowledge, and personal development, which is improvements in students' attitudes, motivation, and other personal attributes, are not measured in this study.

INPUT	PROCESS	OUTPUT
• Resources that are put into the system to achieve educational objectives. • Ingredients for education. (Teachers, students, facilities, classrooms, labs, teaching materials, financial resources, curriculum, vision, mission statements, and school climate.	• The activities and methods that transform the inputs into outputs. This is the "how" of education. • Methods of content delivery, learning activities, assessments, instructional and socio-emotional support, teacher training programs, and school management administration.	• Immediate results or end-products of the educational process. • assessed based on the initial objectives. • Qualified graduates, student academic achievements, (e.g., test scores), enhanced skills, publications (in higher education), and improved productivity. • While sometimes conflated with outputs, outcomes refer to the long-term impact or consequence of the education and society (e.g., employment rates, economic contribution).

Fig: The Input-Output Model

Methodology

A quantitative descriptive cross-sectional research design was used to find out the students' satisfaction with the academic environment. Maharajgunj Nursing Campus was the study setting. All the bachelor level nursing students were the study population. The sample size was calculated using the standard Cochran's formula $n = Z^2pq/m^2$, where n= sample size, Z= Z score, i.e., 1.96 for 95% confidence interval, p= expected proportion 0.05, and m= margin of error as 5%. All the students studying in the first, second, and third

years of both B.Sc. and BNS were included in the study. Non-probability census method was used to collect the samples. The total sample size was 238. A structured self-administered questionnaire was developed, which included 2 Parts: Part I included socio-demographic and academic-related characteristics of the respondents. Part II contained statements related to satisfaction with the academic environment. As consistent with the input-output model, the statements related to academic environments included statements concerning the teaching quality, collaboration and teamwork work and availability of learning facilities and resources. It consisted of 40 statements. For each statement, scoring was done on a Likert scale as Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). The instrument was developed in the English language. The content usability of the instrument was enhanced by an extensive review of literature and consulting with subject experts. Ethical clearance was taken from the Institutional Review Committee (IRC) of the Institute of Medicine, Tribhuvan University, and the IRC number is 197(6-11) E2 080/081. The purpose of the study was explained, and written informed consent was taken from each respondent before data collection. Anonymity was maintained by keeping a code number for each respondent. Confidentiality was ensured by keeping the information safe, and it was used only for study purposes. Similarly, the principle of respect for human dignity was maintained by respecting the respondent's choice of voluntary participation. The respondents were informed that they had the right to withdraw from the study at any time. A self-administered questionnaire was distributed at their convenience time. It took 15-20 minutes to fill up the questionnaire. The filled questionnaires were collected on the same day of distribution and were checked for completeness. Data collection was done from 26th November to 8th December, 2023. The collected data were reviewed and checked for completeness. Coding and organizing of the data were done, and the coded data were entered in a datasheet. It was analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics (frequency, percentage, mean, median, inter-quartile range, and standard deviation) and inferential statistics (Chi-Square and Fisher's exact) test were used to analyze the data.

Results

This section presents the results of the analysis of the findings. The first section presents the demographic and academic-related characteristics of the respondents, the second section presents the perception of respondents in various areas, like the perception towards teaching environment, that is, quality of teaching, perception towards collaboration and teamwork work and the perception towards availability of learning facilities and resources provided to the students. The final section presents the level of perception of the educational environment of the respondents and its associated variables.

Table 1. *Demographic and Academic-Related Characteristics of the Respondents*   n=238

Characteristics	Number	Percent
Age Group		
15-25	**185**	**77.7**
26-35	53	22.3
Mean Age 22.80±3.270 Min=18, Max=35		
Sex		
Female	234	98.3
Male	4	1.7
Motivation to Choose Nursing		
Personal interest	181	75.1
Randomly chosen	37	15.5
Family Pressure	12	5.0
Peer Pressure	8	3.4
Academic Program Enrolled		
Bachelor of Nursing Science	124	52.1
BSc. Nursing	114	47.9
Living with		
Hostel friends	146	61.3
Parents and siblings	64	26.9
Alone	16	6.7
Relatives	12	5.0

Table 1 shows that the majority, 66.8% of the respondents, were between the ages of 15-25 years. Regarding motivation to choose nursing, 75.1% of the students chose to study nursing due to their own interest. Regarding academic program, 52.1% of students were from the Bachelor of Nursing Science (BNS) and 47.9% from the BSc. Nursing, and among them, 61.3% of students were residing in the hostel.

Table 2. *Satisfaction of Respondents on Quality of Teaching*   n=268

Statements	Responses										Median (IQR)
	5		4		3		2		1		
	No.	%	No.	%	No.	%	No	%	No	%	
Teachers are well prepared	67	28.2	141	59.2	25	10.5	5	2.1	-	-	4(4-5)
Teachers encourage participation.	69	29	142	59.7	21	18.8	6	2.5	-	-	4(4-5)
Sufficiently develop competence.	50	21	132	55.5	41	17.2	13	5.5	2	0.8	4(4-4)
Teaching is student-centered.	59	24.8	125	52.5	36	15.1	16	6.4	2	0.8	4(4-4)
Teachers are usually available.	55	23.1	102	42.9	54	22.7	21	8.8	6	2.5	4(3-4)
Gives time to understand.	43	18.1	130	54.6	44	18.5	18	7.6	3	1.3	4(3-4)
Can express academic concerns.	37	15.5	119	50	53	22.3	25	10.5	4	1.7	4(3-4)
Teachers are fair and unbiased.	45	18.9	112	47.1	47	19.7	29	12.2	5	2.1	4(3-4)
Classroom non-threatening.	66	27.7	145	60.9	17	7.8	9	3.8	1	0.4	4(4-4)
Develop confidence.	45	18.9	143	60.1	30	12.6	18	7.6	2	0.8	4(4-4)
Teaching methods are exciting.	36	15.1	103	43.3	63	26.5	34	14.3	2	0.8	4(3-4)
Chances to evaluate progress.	30	12.6	128	153.8	47	19	25	10.5	8	3.4	4(3-4)
Provide constructive feedback.	49	20.6	146	61.3	27	11.3	13	5.5	3	1.3	4(4-4)
Overall Quality of Teaching											50(46-64)

5= Strongly Agree   4=Agree   3=Uncertain   2=Disagree   1= Strongly Disagree

Table 2 shows the level of students' satisfaction with quality teaching. Among 238 respondents, 59.2% agreed that teachers are well prepared, 59.7% agreed the teachers encouraging participation in the class, 55.5 % agreed that teaching is sufficiently concerned to develop competency, and 52.5% agreed that teaching is student-centered, only 42.9% agreed that teachers are available during office hours, and 54.6% agreed that students were given enough time to understand, 50% agreed that they can freely express their academic concerns to their teachers, 47.1% agreed that teachers are fair and unbiased. Regarding the classroom environment is non-threatening, 60.9% of students agreed. 60.1 % agreed that teaching is sufficiently concerned to develop their confidence. Likewise, 43.3% agreed that teaching methods used in the classroom were exciting. 53.8% agreed that frequent chances were given to evaluate their academic progress, and 61.3% agreed that teachers provided constructive feedback.

Table 3. *Satisfaction of Respondents on Teamwork and Collaboration*   n=238

Statements	Responses										Median (IQR)
	5		4		3		2		1		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Have supportive friends.	83	34.9	134	56.3	16	6.7	4	1.7	1	0.4	4 (4-5)
Good coordination.	52	21.8	138	58.0	33	13.9	14	5.9	1	0.4	4 (4)
Good-interaction.	36	15.1	131	55.0	48	20.2	22	9.2	1	0.4	4 (3-4)
Good collaboration teacher.	29	12.2	145	60.9	52	12.6	12	5.0	-	-	4 (3-4)
Good collaboration, admin.	14	5.9	103	43.3	82	26.5	34	14.3	5	2.1	3(3-4)
Good support system.	23	9.7	83	34.9	71	19	49	20.6	12	5.0	3(2-4)
Expressing availability.	17	7.1	78	32.8	81	11.3	42	17.6	20	8.4	3(2-4)
Overall Score											26 (22-28)

5= Strongly Agree   4=Agree   3=Uncertain   2=Disagree   1= Strongly Disagree

Table 3 shows the students' level of satisfaction with teamwork and collaboration. 56.3% agreed on having supportive friends. 58% agreed on their good coordination with friends during teamwork. Regarding interaction between students of different groups, 55% agreed. Similarly, 60.9% agreed that there is good collaboration with teachers, and no one strongly disagreed with it. 43.3% agreed on good collaboration with the administration. 34.9% agreed on a good support system for students who get stressed. 34% were uncertain regarding channels for expressing students' complaints.

Table 4. *Satisfaction of Respondents on Learning Facilities and Resources*   n=238

Statements	Responses										Median (IQR)
	5		4		3		2		1		
	No.	%	No.	%	No	%	No	%	No	%	
Adequate books.	58	24.4	98	41.2	28	11.8	41	17.2	13	5.5	4(3-4)
Adequate internet facility.	38	16.0	100	42.0	41	17.2	45	18.9	14	5.9	4(2.75-4)
Availability of LCD.	78	32.8	138	58.0	14	5.9	7	2.9	1	0.4	4(4-5)
Availability of the board.	99	41.6	121	50.9	14	5.9	4	1.7	-	-	4(4-5)
Well-equipped labs.	34	14.3	129	54.2	45	18.9	25	10.5	5	2.1	4(3-4)
Appropriate lights.	105	44.1	116	48.7	9	3.8	8	3.4	-	-	4(4-5)
Appropriate ventilation.	103	43.3	117	49.2	9	3.7	8	3.4	1	0.4	4(4-5)
Facility of photocopy.	48	20.2	92	38.7	45	18.9	29	12.2	24	10.1	4(3-4)
Printer facility available.	39	16.4	90	37.8	55	23.1	27	11.3	27	11.3	4(3-4)
Provision hostel services.	30	12.6	114	47.9	42	17.6	29	12.2	23	9.7	4(3-4)
Overall Score											39(34-42)

5= Strongly Agree   4=Agree   3=Uncertain   2=Disagree   1=Strongly Disagree

Table 4 shows the students' level of satisfaction on learning facilities and resources. 41.2% agreed on their adequate facilities of textbooks and references in the library. Regarding adequate facility of internet facilities, 42 % agreed. Similarly, 58% agreed that there is availability of LCD projectors. 50.9 % agreed that there is availability of whiteboards and markers in the classroom. Also, 54.2% agreed on Simulation and skill labs are well-equipped. 48.7 % agreed and 44.1 % strongly agreed. 49.2% agreed that there is appropriate ventilation in the classroom. 38.7% agreed that facility of photocopy facility is available. Likewise, 37.8% agreed on the printer facility available in the library. 47.9% agreed on the provision of good hostel facilities in the college.

Table 5. *Satisfaction of Respondents on Administrative Supports*   n=238

Statements	Responses										Median (IQR)
	5		4		3		2		1		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Can express academic concerns.	19	8.0	83	34.9	83	34.9	41	17.2	12	5.0	3(3-4)
Suitable class schedules.	33	13.9	128	53.8	38	16.0	30	12.6	9	3.8	4(3-4)
Coordination of college/clinical.	41	17.2	152	63.3	26	10.9	11	4.6	8	3.4	4(4-4)
Coordination of college & field.	33	13.9	146	61.3	38	16.0	16	6.7	5	2.1	4(3.75-4)
Good transportation services.	29	12.2	111	46.6	50	21.0	31	13.0	17	7.1	4(3-4)
Exams are conducted timely.	35	14.7	103	43.3	48	20.2	37	15.5	15	6.3	4(3-4)
Results are published timely.	34	14.3	90	37.8	54	22.7	39	16.4	21	18.8	4(2-4)
College notices are informed.	29	12.2	112	47.2	47	19.7	42	17.6	8	3.4	4(3-4)
Extracurricular activities.	21	8.8	76	31.9	78	32.8	46	19.3	17	7.1	3(2-4)
Provision of scholarships.	45	18.9	96	40.3	50	21.0	23	9.7	24	10.1	4(3-4)
Overall Score											36(30-39)

5= Strongly Agree   4=Agree   3=Uncertain   2=Disagree   1= Strongly Disagree

Table 5 shows the students' satisfaction on administrative support. Regarding freely expressing academic and other concerns to the administration, nearly one-third (34.9%) agreed. Similarly, 53.8% agreed on class schedules and timings suitable for their learning needs. Also, 63.3% agreed on their good coordination between the college and clinical areas. 61.3% agreed on good coordination between college and field areas. 46.6% agreed on good facilities of transportation services. 43.3% agreed on exams being conducted timely. 37.8% agreed on the result being published timely. Regarding notices on college events being informed timely manner, 47.2% agreed. 32.8% were uncertain about extracurricular activities conducted regularly. Likewise, 40.3% agreed on the good provision of scholarships to the needy and bright students.

Table 6. *Level of Satisfaction of Respondents on Academic Environment*   n=238

Level of Satisfaction	Number	Percent
Low Satisfaction (Score ≤ 120)	25	10.5
High Satisfaction (Score > 120)	213	89.5
Total	**238**	**100.0**

Possible Score: 40-200 Obtained Score:79-127

Table 6 shows the level of satisfaction with the academic environment. The majority of the respondents (89.5%) had a high level of satisfaction with it, while only 10.5% had low satisfaction.

Table 7. *Association between Level of Satisfaction and Age, Programme and Academic year of the Respondents*   n=238

Variables	Level of Satisfaction		Chi-square	p-value
	Low	**High**		
	No. (%)	**No. (%)**		
Age in completed years				
≤ 23 years	19 (14.1)	115 (85.9)	1.587	0.036*
> 23 years	6 (5.7)	98 (94.3)		
Academic Program Enrolled				
BSc. Nursing	16 (14.0)	98 (86.0)	2.902	0.088
Bachelor of Nursing Science	9 (7.3)	115 (92.7)		
Academic Year				
1st year	3 (3.8)	76 (96.2)		
2nd year	12 (15.8)	64 (84.2)	6.249	0.044*
3rd year	10 (12.0)	73 (88.0)		

* P<0.05, statistically significant

Table 7 shows the association between the level of satisfaction with the academic environment and selected demographic characteristics of the students. Students' level of satisfaction with the academic environment had a significant association with age (p=0.036) and academic year (p=0.044).

Discussion

A descriptive cross-sectional study was done to find out the students' level of satisfaction with the academic environment in a nursing campus. The present study found that Overall satisfaction with the academic environment is high (median score 147.0 out of 200). In a similar study (Shrestha et al.,2019), the Overall Score was slightly lower, i.e., 131.25 out of 200, indicating that the perception of the learning environment among nursing students was positive. In contrast to this, in a study (Mohamad Helal et al., 2013), the overall score was 92.6 out of 200, indicating a Low satisfaction level of students. Similarly, the present study shows that 89.9% of students were highly satisfied, indicating a high level of satisfaction with the academic environment. It is slightly higher than the findings of a similar study (Mirghani & Elnour, 2017) in which 74.5% of the students view the academic environment as positive. While Students were neither satisfied nor dissatisfied with a Mean Score of 51.72 out of 100(EI Sayed Abusaad et al.,2019). In terms of Sub-class, the Satisfaction level was highest on the subscale quality of teaching in the present study. But, in a similar study (Abraham et al., 2018), the highest satisfaction was on the subscale learning facilities and resources. Level of satisfaction with the academic environment tends to have a statistically significant association with academic year (P=0.038). It was supported similar study (Chandana & Hettiarachchi, 2013) with P=0.02.

Limitation

This study was limited to the students of only one college, so findings cannot be

generalized. The setting of the study was the Central College of Nursing, situated in the heart of Kathmandu, the capital city of Nepal. It is one of the oldest government nursing colleges with adequate facilities, trained faculty, and other resources, so the results may not be consistent with the other constituent and affiliated colleges of nursing in our country, Nepal.

Conclusion

 The study concludes that most of the students are highly satisfied with the academic environment and are most satisfied with the quality of teaching. However, students are less satisfied with the support system during stress, channels for expressing their complaints, the availability of internet services, and administrative support. Satisfaction level with the academic environment tends to be associated with age and year of study of the students. It is recommended that there should be a good support system for students who get stressed, availability of channels for expressing students' complaints, a facility of good internet service, and good administrative support to enhance the academic learning environment and students' satisfaction.

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